to be connected with an alarm devices and a telephone receiver, and means for rotating both of said coils when the alarm is in circuit so as to generate a current in one of the coils and actuate the alarm device. 7th. An induction coil, comprising a permanent magnet having separated and opposed pole pieces, two separate coils of different sized wire wound upon a suitable core, one acting as a primary coil and the other as a secondary coil, said core and coils movably mounted between said opposed pole core and coils movably mounted between said opposed pole pieces, so as to form part of the magnetic circuit of the permanent magnet, and means for connecting said respective coils with a primary and a secondary circuit. 8th. A telephone system, com-prising at least two instruments located at different points, each comprising a receiver and a transmitter, means for connecting the two instruments together by an electric circuit, an induction coil associated with each instrument, comprising a permanent magnet having opposed pole pieces, with two separate coils wound upon a core of magnetic material mounted between said opposed pole pieces, so as to form part of the magnetic circuit of the permanent magnet, one of said coils being the primary coil and the other the secondary coil, the primary coil of each induction coil being connected in the main circuit between the two instruments when the talking circuit is completed. 9th. A telephone system, comprising at least two instruments located at different points, each comprising a receiver and a transmitter, means for connecting the two instruments together by an electric circuit, an induction coil associated with each instrument, said induction coil comprising a permanent magnet having opposed pole pieces, with two separate coils wound upon a core of magnetic material mounted between said opposed pole pieces, so as to form part of the magnetic circuit of the permanent magnet, one of said coils being the primary coil and the other the secondary coil, the primary coil of each induction coil being connected in the main circuit between the two instruments when the receiver. In the main circuit between the two mainteness when the talking circuit is completed, the secondary cofi of each induction coil connected in a local secondary circuit with its associated receiver. Ioth. A telephone system, comprising a least two instruments located at different points, each comprising a receiver, a transmitter, an induction coil and a signalling device, a main line connecting said instruments normally arranged so that the signalling devices and the secondary coils of said induction coils are in circuit, a switching device associated with each instrument and adapted to vary the circuits so as to connect the secondary coil of each instruments in a local circuit with its associated receiver and to connect the two primary coils and transmitters in the main line so as to form the talking circuit. 11th. A telephone system, comprising at least two instruments located at different points, each instrument comprising a receiver, a transmitter, a signalling device and an induction coil, a main line circuit between the two instruments normally connected in circuit through the signalling devices, a source of electric supply in the transmitter circuit, a local secondary circuit connected with the secondary coil of each instrument normally open, a switching device associated with each instrument and adapted when operated to disconnect the signalling device from the main circuit and connect the transmitters and the primary coil of the induction coils in said main circuit and close the local secondary circuit. 12th. A telephone system, comprising at least two instruments located at different, points, each instrument comprising a receiver, a transmitter, a signalling device and an induction coil. a main line circuit between the two instruments normally connected in circuit through the signalling devices, a source of electric supply in the transmitter circuit, a local secondary circuit connected with the secondary coil of each instrument normally open, a movable arm upon which each receiver is supported, a series of contacts associated with each arm, said arms adapted to move when the receivers are taken therefrom, so as to disconnect the signalling devices from the main circuit, close the local secondary circuit and connect the transmitters and the primary coils of the induction coils in said main circuit, substantially as described.

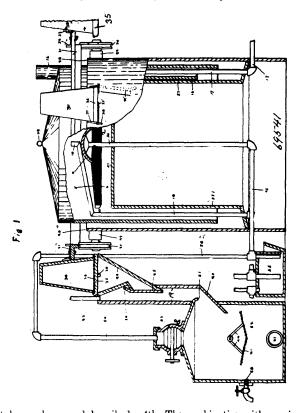
## No. 69,541. Acetylene Gas Generator.

(Générateur de gaz acétylène.)

Timothy Byron Rider, Fitch Bay, Quebec, Canada, 29th November, 1900; 6 years. (Filed 10th September, 1900.)

Claim. -1st. The combinations with a casing, of a partition therein, a tube extending through the partition to a point thereabove and having slots within the lower end thereof, a slotted valve within the lower end of the tube, means for revolving the valve within the tube, and a bell within the upper portion of the easing, as shown and described. 2nd. The combination with a casing having a partition therein forming a generator thereunder and a gasometer thereover, of a bell within the gasometer, a tube extending through the partition into the bell, said tube having slots within the lower end thereof, a slotted valve revoluble within the lower end of the tube, an arm to the valve, a toothed strip thereto, a shaft journalled within the casing, a pinion thereon enguging the strip, and means for revolving the shaft, as shown and described. 3rd. The combination with a casing having a partition therein forming a generator thereunder and a

an exhaust pipe therein a supply pipe within the generator, and a flexible floating cap filter extending over the top of said central



tube, as shown and described. 4th. The combination with a casing having an inclined partition therein forming a generator thereunder and a gasometer thereover, of a bell within the gasometer, a tube extending through the partition and into the bell and having slots within the lower end thereof, a slotted valve within the lower end of the tube, means for turning said valve within the tube and bringing the slots thereof into or out of register with the slots of the tube, a receptacle without the casing and communicating with the generator, an inclined bottom thereto projecting into the generator, a screen suspended within the generator at a point below the inner edge of the inclined bottom, and a hopper communicating with the receptacle, as shown and described. 5th. The combination with a casing having an inclined partition therein forming a generator thereunder and a gasometer thereover, of a bell within the gasometer, a tube extending through the partition and into the bell and having slots within the lower end of the tube, means for turning said valve within the lower end of the tube, means for turning said valve within the lower end of the tube, means for turning said valve within the tube and bringing the slots thereof into or out of register with the slots of the tube, a receptacle without the casing and communicating with the generator, an inclined bottom thereto projecting into the generator, a screen suspended within the generator, at a point below the inner edge of the inclined bottom. A hopper comnumicating with the receptacle, a gate hinged above the inlet to the receptacle and normally closing the same, an outlet to the receptacle above the gate and a downwardly extending flange to the receptacle at the bottom thereof, as shown and described. 6th. The combinaat the bottom thereof, as shown and described. 6th. The combina-tion with a casing having a partition therein forming a generator thereunder and a gasometer thereover, of a bell within the gaso-meter, a tube extending through the partition and into the bell, means for regulating the flow of gas from the generator, through the said tube, a hopper, a receptacle, connecting said hopper with the interior of said hopper, a movable carriage inclosing the gasometer, a carbide receptacle thereon adapted to register with the top of the hopper, and means for automatically discharging the contents of the hopper, and means for automatically discnarging the contents of the receptacle when in position above the hopper, as shown and described. 7th. The combination with a generator and gasometer, of a hopper, a receptacle connecting said hopper with the interior of the generator, a movable carriage enclosing the gasometer, brackets thereon, a receptacle suspended from each bracket, a hinged bottom to each receptacle, a flexible surface to said bottom, a catch hinged to enclose the bottom, and hold the to the receptacle and adapted to engage the bottom and hold the same in closed position, and a tongue to catch within the path of the having a partition therein forming a generator thereunder and a gasometer thereover, of a bell within the gasometer, a tube extending through the partition and into the bell, said tube having slots within the lower end thereof, a slotted valve within the lower end of the tube, means for revolving the valve within said tube, and bringing the slots thereof, into or out of register with the slots of the tube, a tube depending from the top of the gasometer, grooved wheels journalled thereon, a car-